

	Application No.	Applicant(s)	
Notice of Allowability	09/802,309	KRISHNAN, MURALI R.	
	Examiner	Art Unit	T
	Ricardo Pizarro	2661	
The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOT OF THE OFFICE OF THE OFFICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOT THE OFFICE OF THE OFFICE OF THE OFFICE OF THE OFFICE OFFI	(OR REMAINS) CLOSED in or other appropriate communication. This application is seand MPEP 1308.	this application. If not inclu- inication will be mailed in du	ded e course. THIS
1. This communication is responsive to <u>Amendment received</u>	<u>on 12/03/04</u> .		
2. The allowed claim(s) is/are <u>1, 3-20, 22, 24, 26-29, 31-43, 4</u>	5-49, 51-56. They have bee	n renumbered 1-49.	
3. \square The drawings filed on <u>07 March 2001</u> are accepted by the	Examiner.		
 4. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Applicatio	n No	cation from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the re	equirements
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			NOTICE OF
6. CORRECTED DRAWINGS (as "replacement sheets") mus (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the state of the sheet.	on's Patent Drawing Review . s Amendment / Comment or .84(c)) should be written on th	in the Office action of ne drawings in the front (not the	ne back) of
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			Note the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	6. ☐ Interview Su Paper No./i 8), 7. ☐ Examiner's 8. ☑ Examiner's	formal Patent Application (PT ummary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Al	lowance
		CHAU NGUYEN SUPERVISORY PATENT E	XAMINER

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Examiner's Amendment

1. Examiner's amendment for the record appears below. Should the changes and/or

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additions be unacceptable to applicant, an amendment may be filed as provided by 37

CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later that the payment of the issue fee. Authorization for this examiner's amendment

was given in a telephone interview with Mr. Allan Sponseller on 2/1/05

CLAIMS HAVE BEEN AMENDED AS FOLLOW:

Claim 1

One or more computer-readable media having stored thereon a plurality of instructions

that, when executed by one or more processors of a computer, cause the one or more

processors to:

store data indicative of a data transmission rate for each of previous server

operations;

generate, by averaging the stored data transmission rates, a bandwidth value

indicating an average bandwidth used by a server to perform the previous server

operations;

receive a request for the server to perform an additional server operation;

compare the bandwidth value to a first threshold and a second threshold; and

restrict the request in a first manner if the bandwidth value exceeds the first threshold but does not exceed the second threshold, and restrict the request in a second manner if the bandwidth value exceeds the second threshold.

wherein to restrict the request in the first manner is to delay the request wherein to restrict the request in the second manner is to block the request

Claim 3

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

generate a bandwidth value indicating an average bandwidth used by a server to perform previous server operations;

receive a request for the server to perform an additional server operation; compare the bandwidth value to a first threshold and a second threshold; and

restrict the request in a first manner if both the bandwidth value exceeds the first threshold and the additional server operation is of a first type, and restrict the request in a second manner if the bandwidth value exceeds the second threshold.

wherein to restrict the request in the first manner is to delay the request wherein to restrict the request in the second manner is to block the request Application/Control Number: 09/802,309

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Claim 8

One or more computer-readable media having stored thereon a plurality of instructions

that, when executed by one or more processors of a computer, cause the one or more

processors to:

generate a bandwidth value indicating an average bandwidth used by a server to

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perform previous server operations;

receive a request for the server to perform an additional server operation;

compare the bandwidth value to a threshold;

restrict the request in a first manner if the bandwidth value exceeds the

threshold, wherein to restrict the request in the first manner is to delay the request;

compare the bandwidth value to another threshold, wherein the threshold is less than

the another threshold; and

restrict the request in a second manner if the bandwidth value exceeds the

another threshold, wherein to restrict the request in the second manner is to block the

request.

Claim 15

A method comprising:

receiving a request to perform a server operation; and

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storing data indicative of a data transmission rate for each of previous server operations;

generating an average bandwidth by averaging the stored data transmission rates; and

restricting performance of the request based at least in part on [[an]] the average bandwidth used in performing previous server operations, wherein the restricting comprises:

comparing the average bandwidth to at least one of a first threshold and a second threshold;

restricting the request in a first manner if the average bandwidth exceeds the first threshold but does not exceed the second threshold; and restricting the request in a second manner if the average bandwidth exceeds the second threshold.

wherein to restrict the request in the first manner is to delay the request
wherein to restrict the request in the second manner is to block the request

Claim 24

A host system comprising:

at least one network server;

an asynchronous thread queue to receive a request, from a client process, to be performed by one of the at least one network server; and

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a bandwidth throttling system, coupled to the asynchronous thread queue, to determine whether performance of the request by the one of the at least one network server is to be restricted based at least in part on both an average bandwidth used by the one of the at least one network server in performing previous server operations and on a type of the request, wherein the bandwidth throttling system is further to:

store data indicative of a data transmission rate for each of the previous server operations; and

generate the average bandwidth by averaging the stored data transmission rates[.];and

wherein to restrict the request in the first manner is to delay the request wherein to restrict the request in the second manner is to block the request

Claim 29

A method comprising:

storing data indicative of a data transmission rate for each of previous server operations;

generating, by averaging the stored data transmission rates, a value indicating a bandwidth used by a server to perform the previous server operations;

receiving a request for the server to perform an additional server operation; and

restricting the request in a first manner if the additional server operation is of a first type and the value exceeds a first threshold but does not exceed a second threshold, and restricting the request in a second manner if the value exceeds the second threshold[.];

wherein to restrict the request in the first manner is to delay the request wherein to restrict the request in the second manner is to block the request

wherein to restrict the request in the first manner is to delay the request wherein to restrict the request in the second manner is to block the request

Claim 43

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

store data indicative of a data transmission rate for each of previous server operations;

generate, by averaging the stored data transmission rates, a value indicating a bandwidth used by a server to perform previous server operations;

receive a request for the server to perform an additional server operation; compare the value to at least one of a first threshold and a second threshold;

restricting performance of a request based at least in part on an average bandwidth used in performing said previous server operations;

delay the request if the value exceeds the first threshold but does not exceed the second threshold, and block the request if the value exceeds the second threshold.

Claim 46

One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, cause the one or more processors to:

generate a value indicating a bandwidth used by a server to perform previous server operations by averaging stored data transmission rates indicative of data transmission rates of said previous server operations;

receive a request for the server to perform an additional server operation;

compare the value to at least one of a first threshold and a second threshold; and

restricting performance of a request based at least in part on an average

bandwidth used in performing said previous server operations

delay the request only if the request is of a first type and if the value exceeds the first threshold but does not exceed the second threshold, and block the request only if the request is of the first type and if the value exceeds the second threshold.

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (7571) 272-3077. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:00 PM. The fax number for this Group is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chau Nguyen** can be reached on (571) 272-3126.

Feb. 22,2005

Ricardo M. Pizarro